IN THE CLAIMS:

Please amend the claims as presented in the below listing of claims. This listing replaces any previous listing of claims.

1. (Currently Amended) A method for simulating ~~one or more components~~ operation of a machine component, comprising:

establishing ~~an~~ and storing a first original engineering model of a machine component and additional original engineering models for a set of sub-components of the machine component, wherein each of the sub-components is compatible for use with the machine component;

lightening the first original engineering model to establish a first lightened engineering model and lightening each of the additional original engineering models to establish additional lightened engineering models, the lightened engineering models including less data than their respective original engineering models;

storing the lightened engineering models at a server system;

displaying, in a web browser at a client system, a web page including a selection area for selecting the machine component;

receiving, at the server system, selection data ~~for configuring the component~~ from a user, the selection data selecting the machine component from the web page;

~~lightening the engineering model using a model reduction process;~~

in response to the selection data:

displaying the first lightened engineering model in the browser at the client system, thereby establishing a web-based model of the machine component based on the selection data and the first lightened engineering model; and

presenting a list of the set of additional lightened engineering models in the web browser at the client system as selectable sub-components;

receiving a selection, from the plurality of additional lightened engineering models in the web browser, of one or more of the sub-components to add to the web-based model;

adding one or more of the sub-components to the displayed web-based model to create an updated web-based model, and displaying the updated web-based model in the web browser;

providing, to the user, one or more options reflecting different simulation environments for simulating operation of the web-based model of the configured component;

receiving a selection from the user reflecting a selected simulation environment; and

~~performing simulation~~ simulating operation of the updated web-based model in the selected simulation environment.

2-9. (Canceled)

10. (Currently Amended) The method of claim 1, wherein the ~~web-based~~ first original engineering model includes a 3D image model of the

machine component and textual data associated with at least one of physical, functional, and marketing characteristics of the machine component, and wherein lightening the first original engineering model includes removing both image and textual data from the first original engineering model.

11-13. (Canceled)

14. (Currently Amended) The method of claim ~~13~~ 1 wherein the updated web-based model is a model of a self-propelled mobile machine, and wherein simulating operation includes simulating using the machine to move a load of virtual construction-related objects in the selected environment, and further including:

providing, to the user, feedback data reflecting the size of the load that fits into the selected model of the machine within the selected environment ~~at least one of physical and functional characteristics of the web-based model based on the simulated manipulation~~.

15. (Canceled)

16. (Currently Amended) The method of claim ~~15~~ 1, wherein the selection area for selecting a machine component includes a list of different option packages for the machine, and wherein the selected simulation environment includes a work site environment for the machine to virtually operate within, and further including:

selecting, by the user, an option package from the selection area and a work site environment from the different simulation environments;

simulating operation of the selected machine component and its selected option package in the selected work site environment; and

providing, to the user, feedback data reflecting the ability of the selected machine component and its selected option package to operate in the selected work site environment ~~at least one of physical and functional effects of the web-based model based on the simulated operation in the simulated work environment~~.

17-26. (Canceled)

27. (Currently Amended) A system for simulating ~~one or more components~~ operation of a machine component, comprising:

a client system operated by a user; and

a server system, including:

a memory for storing a first original engineering model of a machine component and additional original engineering models for a set of sub-components of the machine component, wherein each of the sub-components is compatible for use with the machine component;

a computer-executed process for lightening the first engineering model to establish a first engineering model and lightening each of the additional original engineering models to establish additional lightened engineering models, the lightened engineering models including less data than their respective original engineering models;

a memory for storing the lightened engineering models;

a memory for storing data for generating a web page for display at a client system, the web page including a selection area for selecting the machine component;

a computer-executed process for receiving ~~configuration~~ selection data from the client system, the selection data ~~reflecting a configuration of a component of a machine~~ indicating the machine component ~~selected by the user~~;

~~a process for lightening an engineering model of the component using a model reduction process;~~

a computer-executed process for, in response to receiving the selection data, including the first lightened engineering model in a web page for the client system, thereby establishing a web-based model of the machine component based on the ~~configuration~~ selection data and the first lightened engineering model ~~of the component~~;

a computer-executed process for selecting for display in the web page the additional lightened engineering models as selectable sub-components;

a computer-executed process for receiving a selection, selected from the additional lightened engineering models in the web page, of one or more of the sub-components to add to the web-based model;

a computer-executed process for adding one or more of the sub-components to the displayed web-based model to create an updated

web-based model, and including the updated web-based model in the web page;

a computer-implemented process for providing, to the client system, one or more options reflecting different simulation environments for simulating operation of the updated web-based model of the machine component;

a process for receiving a selection from the client system reflecting a selected simulation environment;

a process for providing, to the client system, a simulated operation ~~simulation~~ of the updated web-based model ~~performing virtual operations~~ in ~~a simulated~~ the selected simulation environment; and

a processor for executing the processes for lightening, receiving, ~~lightening, creating,~~ including, selecting, adding, and providing.

28. (Currently Amended) The system of claim 27, wherein the updated web-based model is a model of a self-propelled mobile machine, wherein simulating operation includes simulating using the machine to move a load of virtual construction-related objects in the selected environment, and wherein the process for providing includes a process for providing, to the client system, feedback data based on the updated web-based model and the selected simulation environment, the feedback data indicating the size of the load that fits into the selected model of the machine within the selected environment ~~reflecting characteristics of the web-based model during the simulation~~.

29-33. (Canceled)

34. (Currently Amended) The system of claim ~~33~~ 27, wherein the selection area for selecting a machine component includes a list of different option packages for the machine, and wherein the selected simulation environment includes a work site environment for the machine to virtually operate within, and further including:

a computer-implemented process for receiving a selection, from a client system, of an option package from the selection area and a work site environment from the different simulation environments;

a computer-implemented process for simulating operation of the selected machine component and the selected option package in the work site environment; and

a computer-implemented process for providing feedback data reflecting the ability of the selected machine component and option package to operate in the selected work site environment ~~at least one of physical and functional characteristics of the web-based model during the simulating operation~~.

35-37. (Canceled)

38. (Currently Amended) A computer-readable medium including instructions for performing a method, when executed by a processor, for simulating ~~one or more components~~ operation of a machine component, the method comprising:

~~establishing an~~ storing at a server system a first original engineering model of a machine component and additional original engineering

models for a set of sub-components of the machine component, wherein each of the of sub-components is compatible for use with the machine component;

lightening the first engineering model to establish a first lightened engineering model and lightening each of the additional original engineering models to establish additional lightened engineering models, the lightened engineering models including less data than their respective original engineering models;

storing the lightened engineering models at the server system;

storing, at the server system, data for generating a web page for display at a client system, the web page including a selection area for selecting the machine component;

receiving, at the server system, selection data ~~for configuring the component~~ from a user, the selection data selecting the machine component from the web page;

~~lightening the engineering model using a model reduction process;~~

in response to the selection data:

including the first lightened engineering model in a web page for the client system, thereby establishing a web-based model of the machine component based on the selection data and the first lightened engineering model; and

selecting for display in the web page the set of additional lightened engineering models as selectable sub-components;

receiving a selection, selected from the plurality of additional lightened engineering models in the web page, of one or more of the sub-components to add to the web-based model;

adding one or more of the sub-components to the displayed web-based model to create an updated web-based model, and including the updated web-based model in the web page;

providing, to the client system, one or more options reflecting different simulation environments for simulating operation of the updated web-based model;

receiving a selection from the client system reflecting a selected simulation environment; and

~~performing simulation~~ simulating operation of the updated web-based model in the selected simulation environment.

39-45. (Canceled)

46. (Previously Presented) The computer-readable medium of claim ~~45~~ 38, wherein the updated web-based model is a model of a self-propelled mobile machine, and wherein simulating operation includes using the machine to move a load of virtual construction-related objects in the selected environment, and further including:

instructions that, when executed by the processor, instruct the server system to provide ~~providing~~, to the user, feedback data reflecting the size of the load that fits into the selected model of the machine within the selected

environment ~~at least one of physical and functional effects of the web-based model based on the simulated operation in the simulated work environment~~.

47. (Canceled)

48. (Currently Amended) The computer-readable medium of claim ~~47~~ 38, wherein the selection area for selecting a machine component includes a list of different option packages for the machine, and wherein the selected simulation environment includes a work site environment, and further including:

instructions that, when executed by the processor:

instruct the server system to provide to the client system option package selection data and a work site environment;

simulate operation of the machine component and a selected option package in the work site environment; and

~~providing~~ provide, to a user, feedback data reflecting the ability of the selected machine component and option package to operate in the selected work site environment ~~characteristics of the duplicate web-based models during the simulated work operation~~.

49-51. (Canceled)